Minutes of MSD Safety Committee Held May 10, 2006 at 9:30 AM

In attendance were:

Rick Kelly, (Chair Safety Committee)
Mark Alper, (Deputy Division Director, MSD/Molecular Foundry)
Doreen AhTye, (NCEM)
Howard Hansen, (EHS-WM)
Paul Johnson, (MSD Safety Tech)
Daniel Garcia (Lanzara Group)
Matthew Langner (Orenstein Group)
Ron Tackaberry, (CXRO)
Frank Svec (Frechet/Svec Group)
Jeff Neaton (Molecular Foundry)
John Seabury (EH&S)
Peggy Hou, (Hou, Visco/Dejonghe Groups)
Craig Jacobson, (Hou, VIsco/Dejonghe Groups)
Bruce Cohen, (Bertozzi/Molecular Foundry)
Robert Schoenlein, (Shank Group)
Virginia Altoe, (Molecular Foundry/Salmeron Group)
Edurado Saiz (Tomsia)
Jim Bustillo, (Molecular Foundry)
Rong Yuan (Ritchie)
Carmen Bates Ross, (Administrator – Safety Committee)
Andrei Istratov, (Weber Group)

MSD Safety Committee Members not present:

Ilan Gur	Alivisatos Group
Ingrid Cotoros	Chemla Group
Norman Manella	Fadley Group
Jeff Beeman	Haller/EMAT
Alex Liddle	Molecular Foundry
Barry Blizanac	Ross Group
Robert Schoenlein	Shank Group
Roger York	Somorjai Group
Joel Ager,	Deputy Chair Safety Committee
Steve Irick,	B2 manager

Zuzanna Lilienthal-Weber
Elena V. Shevchenko

Because this was the first meeting of the Safety Committee held in the new building 67 Chemla conference room, Rick gave evacuation instructions before the meeting officially started.

Items in order of discussion:

1. Mark spoke of the importance of safety committee member's role in their respective groups. He emphasized the fact that this is not only a forum for top down information but rather a forum for shared information.

2. Rick discussed the Chemical transfers from old labs to their new locations in the Molecular foundry. So far 1 incident that was equipment related. This transfer has been an opportunity to get rid of legacy chemicals and has also been responsible pinpointing the importance of the listing chemicals in the database.

3. Our previous performance on the self-assessment was 50% entry of chemicals. We need to improve that score so that we pass the self assessment.

4. Rick lead into a discussion of materials handling specifically recounting his observations of handling liquid nitrogen. He noted the lack of use of personal protective equipment . John Seabury added that liquid nitrogen is -190^{o} centigrade and at that temperature water freezes and that is important to us because we are 70% water. Eyeballs would be significantly damaged from a splash of liquid nitrogen. He also recounted a story of an accident in 2000/01 when a Dewar burped out nitrogen and the user spent 3 weeks with bandaged hands due to the resulting burns. He said to remember that vapors from the dewars are face level. Use shields and glasses.

A question posed from the floor wanted to know if cautionary signage is posted by stationary tanks The answer - the signs were provided and should still be posted. John further replied to another point from the floor regarding personal safety equipment being available at tanks. He said face shields and gloves should be near equipment and suggested writing the groups name and room numbers on the safety gear since it disappears easily and frequently. John says he is willing to visit any group to discuss procedures for used of liquid nitrogen. Rick added that all users should take John's cryogenics class.

5. Rick discussed the lessons learned handout regarding superglue. Points added in addition to the information in the handout – someone had tagged the eyewash as not in service when in fact it was working. Some other possible remedies were posed as a solution to this particular incident – washing the eyes with a weak solution of acetone. It was noted that the person was not thinking – the acetone would have worked but would have stung. And had the person been able to use the eyewash (water) in this instance, it may have actually accelerated the bonding. The point was also raised that people have a

tendency to not want to use the eyewash station or emergency showers because they don't want to cause a mess. John from EH & S added that actual use of eyewashes and emergency showers is rare on the hill. It was noted that even though it is not written that it should be a policy that safety glasses should be used whenever you enter a lab to work.

6. Discussion of the other lessons learned involved electrical cords. There was an approved use of a space heater but because of a jumble of cords the contractor taped all of the cords together and left. The cords almost started a fire. The point is use cords in the manner intended – do not modify. Also listen when EH &S points out possible electrical hazards and act accordingly.

7. Four injuries since the last safety meeting:

One was a bump on the head that was not a normal situation. Equipment was hanging low – not in it's normal position and the user banged his head. Solution is only to be aware of equipment position.

One person had a bad respiratory reaction to adhesives used in building 62 for floor tile. This adhesive is a natural soy product and the least offensive product of its kind for the intended purpose. The only solution is to forewarn building population of its use and keep the area under negative pressure.

There was a chemical splash in building 67 due to equipment failure. When a user resorted chemicals in a new cabinet, the shelves collapsed and he was splashed with solvent. The user reacted properly, removing soiled clothing and was driven to health services. It was discovered that the cabinet failed at three (3) points. The resulting conclusion was faulty cabinet design. The immediate solution was getting the cabinets retrofitted. The long term solution is that we must be aware of our assumptions when making decisions. We cannot assume a product is safe because it is familiar.

The fourth injury occurred on campus when a user disconnected a hose from a glass fitting. The glass shattered and cut the user's hand. Glass is particularly troublesome in terms of number of potential injuries. Glass is the weakest part of a connection. Peeling rubber from a glass connection seems to be a solution. Peter Ruegg also added that silicone lubricant is helpful in releasing the glass/rubber connection.

We were reminded that should someone have a laceration from glass or anything else we should not downplay the seriousness. Lacerations have a short time when they can be stitched (resulting in a smaller scar) and also not having a cut properly attended to could lead to infection and abscess. John Seabury shared a past scenario where that very situation occurred and lead to a person needing IV antibiotics.

We do want people to report injuries and we also want to keep the resulting paperwork down to a reasonable minimum. Also, we must figure out a way to get information from campus (Tang Center) to LBNL health services with a minimum of fuss so that DOE is not blindsided by reportable injury information that is reported well after the incident.

8. Rick reported on the lab walkthrough findings. In one example of a laser lab he found that a special key was used in lieu of an interlock and that only a few people had the key. As a result the door had been jimmied. DOE halted the walkthrough after visiting a few labs due to the number of violations

Rick introduced Bob Schoenlien – chair of the laser safety committee who had a PowerPoint presentation prepared. A copy of that report is attached to these minutes.

9. Rick reports that all AHD's will be reported on an electronic system. This process will give everyone a chance to update their AHD's as they migrate to the new system.

10. EH & S resources to end-users will increase due to additional staff – a dedicated full time laser specialist.

11. Rick reported that old refrigerator in 62 left with legacy chemicals will cost at least $10,000 in research dollars to clean up. The importance of a succession plan was discussed. Establishing a clear transfer plan helps avoid procedures/chemicals from being forgotten.

Non-compliance penalties may be re-introduced.

12. John Seabury presented his Integrated Functional Appraisal report. A copy of that slide show is attached to these minutes.

13. Rick reminded us that the self assessment process will be evaluated over the next couple of months.

An inquirer from the floor asked about our practices and procedures with respect to student's safety. John replied that students are treated the same as any researcher. All safety protocol is expected to be followed. It was also noted that safety training for foreign visitors, particularly for Molecular Foundry cannot be too complicated to complete or it will impact usage.

Rick commented that there was a 5 month span between safety meeting and that the next meeting will occur much sooner. The meeting was adjourned.